

REMARKS

This communication responds to the Office Action of February 16, 2011, in which claims 1-37 are pending. Claims 1-20, 33 and 34 are withdrawn, and claims 21-32 and 35-37 are rejected under 35 U.S.C. § 102(b) as allegedly anticipated in view of the Examiner's cited art.

In response, Applicant has amended claims 21, 26, 36, and 37. In view of the presently submitted amendment, and the remarks provided below in connection therewith, Applicant respectfully submits that claims 21-32 and 35-37 now stand in allowable form. Prompt reconsideration and allowance are therefore requested.

Claim Rejections Under 35 U.S.C. § 112

Claims 21-32 and 35-37 were rejected under 35 U.S.C. § 112, first paragraph, as allegedly failing to comply with the written description requirement. Applicant traverses this rejection for at least the following reasons.

According to the provisions of the M.P.E.P, there is no "*in haec verba*" requirement with regard to the specification in order for amendments to the claims to be properly supported under section 112. *See* M.P.E.P. § 2163(I)(B). Rather, amendments to the claims may be properly supported by any "express, implicit, or inherent disclosure" thereof. *Id.* Implicit and inherent disclosure includes such information as would be readily known and appreciated by those having ordinary skill in the art at the time of the application. *Id.* at § 2163(II)(A)(3).

Claims 21 and 36 have been amended to recite that "the substantial entirety of said superior and inferior surfaces [is] capable of load bearing against respective adjacent vertebrae." As is well known in the art, certain types of bone are "capable of" load bearing against vertebrae, for example, cortical bone. The Examiner's previously cited reference, *Shepard* (U.S. Publication No. 2004/0078078), is illustrative of such knowledge in that it distinguishes bone that is not "capable of" such load bearing, for example cancellous bone, and bone that is "capable of" such load bearing, for example cortical bone. *See, e.g.,* paras. [0021], [0063]. Applicant's specification, in one embodiment, discloses the entire implant being comprised of cortical bone (*see* paragraph [00057]), and thus it naturally follows that any surfaces thereof designed for contact with

adjacent vertebrae, for example the superior and inferior surfaces (*see* FIGs. 6 and 7 for disclosure regarding the positioning of the implant within the spinal column), would be “capable of load bearing against respective adjacent vertebrae.” Applicants therefore respectfully submit that the entirety of claims 21 and 36 are properly supported under 35 U.S.C. § 112.

Claim 37 includes a recitation that the claimed implant comprises “a body made of cortical bone . . . , the body having an outer peripheral surface substantially entirely of load bearing material” Therefore, for the same reasons as discussed above with regard to claims 21 and 36, claim 37 is in its entirety properly supported under 35 U.S.C. § 112.

For the reasons stated above, Applicant respectfully requests reconsideration and withdrawal of the present rejection.

Claim Rejections Under 35 U.S.C. § 102(b)

Claims 21-32 and 35-37 were rejected under 35 U.S.C. § 102(b) as allegedly anticipated by Boyle et al. (U.S. Patent 6,277,149). Applicant traverses this rejection for at least the following reasons.

According to the provisions of the M.P.E.P., “[a] claim is anticipated only if each and every” aspect of the claim “is found, either expressly or inherently described,” within a single cited reference. *See* M.P.E.P. § 2131 (citing *Verdegaal Bros. v. Union Oil Co.*, 814 F.2d 628, 631 (Fed. Cir. 1987)).

Claims 21, 36, and 37

Claims 21, 36, and 37 have been amended to recite that the “instrument-receiving bore” is “unthreaded.” As disclosed in the specification:

It is important that the implant bore the implant engaging portion 26 be smooth surfaced to optimize coupling between of the portion 26 to the bore 68. Threads or roughness in the surfaces may become damaged due to stress concentration at the thread crests, especially if the portion 26, FIG. 14, were either threaded or smooth if the bore 68, FIG. 2, were threaded or otherwise rough. The portion 26 when impacted against the threads or roughened surface of the implant bore at points such as 73, FIG. 11, or 75, FIG. 13, could easily compress and damage the bone at

these locations, which is not desirable and could destroy the implant.

See para. [00067]. In sharp contrast, the disclosure of *Boyle* requires that, in all embodiments disclosed, there be at least one threaded instrument-receiving bore. See col. 5, l. 61 – col. 6, l. 22. As such, the disclosure of *Boyle* cannot meet “each and every” aspect of the claims as required under section 102(b).

Reconsideration and withdrawal of the rejection is therefore respectfully requested.

Claim 22

Applicants respectfully tranverse the Examiner’s rejection with regard to claim 22. The Examiner has suggested that “FIGs. 16-19” disclose “wherein the [instrument-receiving] bore is blind and does not extend through the weight bearing peripheral surface.” However, such figures do not disclose the depth of the bore. The only figures in *Boyle* that do disclose the depth of the instrument-receiving bore are figures 14 and 15, and such figures show the instrument-receiving bore extending completely through to the central core opening. Applicant therefore respectfully submits that the Examiner’s rejection of claim 22 is unsupported in the reference. (See M.P.E.P. § 2131).

Reconsideration and withdrawal of the rejection is therefore respectfully requested.

Claim 26

Claim 26 has been amended to recite that “the substantially curved portion extend[s] from a first end of the single substantially flat portion to the second end thereof, and the posterior end [is] located along the substantially curved portion.” In sharp contrast, the implants disclosed in *Boyle* include at least four flat surfaces (two sets of parallel surfaces; see FIGs. 16-19 as cited by the Examiner). In further contrast, the portion of the implant disclosed in *Boyle* to which the Examiner likens the claimed “posterior end” is a flat surface (*e.g.*, the right side of FIGs. 17 and 19), as opposed to “being located along the substantially curved portion” as claimed. As such, the disclosure of *Boyle* cannot meet “each and every” aspect of the claims as required under section 102(b).

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Reconsideration and withdrawal of the rejection is therefore respectfully
requested.

CONCLUSION

This response is being submitted on or before August 16, 2011 with the required fee for a 3-month extension of time, making this a timely response. It is believed that no additional fees are due in connection with this filing. However, the Commissioner is authorized to charge any additional fees, including extension fees or other relief which may be required, or credit any overpayment and notify us of same, to Deposit Account No. 132546.

This application now stands in allowable form and reconsideration and allowance is respectfully requested.

Respectfully submitted,

Date: **July 22, 2011**

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